

REMARKS

Claims 2-7 are all the claims pending in the application.

Art Rejections

1. Claims 2, 6 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Asano. Applicant respectfully traverses this rejection for at least the reasons stated below.

Asano does not disclose at least the following claim limitation of independent claims 6 and 7:

a buffer portion for damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion being an elastic member disposed at a position at which said buffer portion faces and contacts a fuel passage

The O-ring in Asano only acts as a sealing means. (See Column 2, lines 49-54, see also Column 3, lines 11-14) Asano fails to disclose, teach or suggest an elastic member O-ring which acts as a buffer by damping the pressure drop such that it is possible to control an after-dripping of injection. Furthermore, the O-ring in Asano does not come into contact with the fuel passage as recited in claims 6 and 7. Thus, the O-ring in Asano does not (and cannot) function as a buffer for damping a change of fuel pressure caused by valve bounce when the needle is closed.

Therefore, in light of the above claim amendments and because Asano fails to teach each element of independent claims 6 and 7, Applicant respectfully requests the Examiner to withdraw the §102(b) rejection from claims 6 and 7. Also, by virtue of its dependency, Applicant respectfully requests the Examiner to withdraw the rejection from dependent claim 2.

2. Claims 6 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kindley. Applicant respectfully traverses this rejection for at least the reasons stated below.

Kindley fails to disclose at least the following limitation of independent claims 6 and 7:

a buffer portion for damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion being an elastic member disposed at a position at which said buffer portion faces and contacts a fuel passage

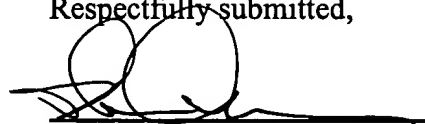
The Examiner maintains that the "buffer portion" as recited in claims 6 and 7, respectively, are met by the multi-dimensional fluid passages 30 of Kindley. The multi-dimensional fluid passages, however, do not function as a buffer. Instead, multiple fluid passages 30 are provided through the armature 20 such that the mass of the armature is reduced thereby minimizing the effect of impact forces on the armature. (See Column 2, lines 63-67 and Column 3, lines 1-25) Therefore, because Kindley fails to teach each claim limitation of independent claims 6 and 7 and in light of the above claim amendments, Applicant respectfully requests that the Examiner withdraw the § 102(b) rejection from the claims.

Reconsideration and allowance of all claims are respectfully requested in view of the following remarks. In view of the foregoing, the claims are now believed to be in form for allowance, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/413,348

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Richard C. Turner', is written over a horizontal line.

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APPENDIX
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims are amended as follows:

2. (Three-times Amended) [A] The fuel injection valve according to claim 6, wherein an elastic member is provided between a sleeve and said core in order to form said buffer portion, said sleeve being disposed between a core and a valve holder of the solenoid.

6. (Amended) A fuel injection valve for opening and closing a needle valve by driving an armature [by] with a solenoid[,], comprising[,]:

a buffer portion for damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion being an elastic member disposed at a position at which said buffer portion faces and contacts a fuel passage located at an upstream side with respect to an end face of said armature located on a side of a nozzle opening side.

7. (Amended) A fuel injection valve for opening and closing a needle valve by driving an armature with a solenoid, comprising:

[dampening means] a buffer portion for damping a change of fuel pressure caused by valve bounce when the needle is closed, said buffer portion [damping means] being an elastic member disposed at a position at which said [damping means] buffer portion faces and contacts a fuel passage located at an upstream side with respect to an end face on the nozzle opening side of said armature. [of said armature located on a side of a nozzle opening side]